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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,795

09/21/2006

Witold Gajewski

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EXAMINER

LIU, HENRY Y

ART UNIT

PAPER NUMBER

3657

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DELIVERY MODE

12/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/593,795</p>	<p>Applicant(s) GAJEWSKI ET AL.</p>	
	<p>Examiner HENRY LIU</p>	<p>Art Unit 3657</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 November 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 4-19.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art Unit 3657

/HENRY LIU/
Examiner, Art Unit 3657

Continuation of 11. does NOT place the application in condition for allowance because: In response to applicant's argument regarding Claim 4 that the Office has not provided an articulated reasoning, the requirement is met if there is some motivation that would have led one of ordinary skill in the art to combine the prior art teachings (MPEP 2141). Here, it would have been obvious to one of ordinary skill in the art to modify the pulley in KUGELMANN with the linear actuator in NAGAI to change the shape of the pulley since electricity is an inexpensive and readily available power source.

In response to applicant's argument that the Office has not discussed exactly how the linear actuator of NAGAI would be incorporated into the wheel of KUGELMANN, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Here, it would be obvious to use a linear actuator which uses brushes to move the sheave halves towards and away from each other.

Applicant's argument that "electricity is an inexpensive and readily available power source" is not a sufficient justification for the modification fails. The disclosure in KUGELMANN listed a number of actuator power sources which could be used without stating any motivation to pick any one of the multiple forms. NAGAI teaches an actuator using electricity and one of ordinary skill in the art would use the actuator instead of the other listed alternatives because electricity is inexpensive and readily available.

In response to applicant's argument regarding Claim 7 that the cross section of the pulley is not round, but rather has twelve distinct flat surfaces is not persuasive. MCINTYRE teaches a round pulley in a certain configuration. An outer circumferential surface of (5a) and (1) corresponds to the rim when the cone like structure made up of parts (5) and (6) are moved outward away from the cone formed by part (4) such that the belt (13) contacts the outer circumferential surfaces of (5a) and (1) and lies in between parts (6) and (4). The rim is in a circular profile in this orientation. When parts (6) and (4) are pushed together such that the belt (13) contacts the surfaces of parts (6) and (4) (Fig. 1), the rim has a non circular polygon profile.

In response to applicant's argument that the Office has not discussed exactly how the piezoelectric stacks in CRAWLY or the inertial elements in LUENBERGER would be incorporated into the pulley in MCINTYRE, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Here, it would be obvious to use piezoelectric stacks to slide parts 6 relative to part 4 till the larger diameter portions of parts 6 protrude from belt path portion of opening 2. Similarly, it would be obvious to use inertia elements to slide parts 6 relative to part 4 till the larger diameter portions of parts 6 protrude from belt path portion of opening 2.

Applicant's argument regarding Claim 10 is not persuasive. Claim 10 does not include the limitation "said hydraulic cylinder urging said spreader to engage said rim urging said rim towards said circular profile as said oil pressure increases.

Applicant's argument regarding Claim 12 is not persuasive. The Office has provided an articulated reasoning. the requirement is met if there is some motivation that would have led one of ordinary skill in the art to combine the prior art teachings (MPEP 2141). Here, it would have been obvious to one of ordinary skill in the art to modify the actuator in MCINTYRE as modified with hydraulic actuator in CORDS so that the actuators are more easily controlled.

In response to applicant's argument that the Office has not discussed exactly how the linear actuator of CORDS would be incorporated into OPPER, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Here, it would have been obvious to one of ordinary skill in the art to modify the actuator in MCINTYRE as modified with hydraulic actuator in CORDS so that the actuators are more easily controlled.

Applicant's argument regarding Claims 13 and 14 are not persuasive. OPPER teaches the use of oil pressure to move the sheaves on the transmission. THOMEY teaches an engine with oil and thus oil pressure. The oil pressure in the engine inherently changes with rpm. Thus, an optimum oil pressure has been taught as a result effective variable. Applicant's argument also fails since KUGELMANN is not a reference in the rejection of Claims 13 and 14.

Applicant's arguments regarding Claims 17 - 19 are not persuasive. THOMEY teaches a method for operating an engine having an endless drive system (10) and a crankshaft pulley, the method comprising: providing an engine (Col. 1 lines 17-33)

KUGELMANN teaches a pulley having a configurable profile between a circular and noncircular profile (Fig. 2) and generates a counteracting torque in response to engine speed (Col. 4 lines 17-67). As the pulley changes shape through rotation, it exerts a counteracting torque on the drive system by bending the belt in an either a smaller or larger radius (Fig. 9, Fig. 10). The profile of the crankshaft pulley is altered in response to a rotational speed of the crankshaft since the faster the pulley turns, the faster the profile changes in order to maintain the same drive ratio and belt tension. The claim language "periodically occurring counteracting torque" is vague enough to encompass the situation where intervals between the counteracting torque are irregular. Thus, the case where the pulleys would change ratios, and thus impart a counteracting torque in the process, whenever the user decides to input a particular drive ratio would meet this claim limitation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the endless drive system in THOMEY with the pulley in KUGELMANN to create an endless drive system in which the belts are easily changed.

Applicant has not claimed that the "rotation of the wheel shape with the rotation of the wheel"

Applicant's arguments regarding Claims 15 and 16 are not persuasive. The timing marks in TURNER orient the sprocket relative to a driving shaft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the pulley in KUGELMANN with the keyway connection in TURNER to allow the pulley to maintain an oval shape where the major and minor axis stay at

a predetermined location relative to a stationary reference point while the pulley is turning. .